

Sub A 25 What is claimed is:

1. A method of recording stream specific information along with data stream in a disk, comprising the steps of:
 - (a) checking whether stream specific information requires to be changed while recording the data stream in the disk;
 - (b) generating stream specific information adequate to the data stream being recorded based on the checked result; and
 - (c) writing the generated stream specific information and an additional information linking the stream specific information with a stream object.
2. The method set forth in claim 1, wherein the additional information consists of start and/or end position data of a related stream object.
3. The method set forth in claim 1, wherein the stream specific information is written in same packetized format that the data stream is written in.
4. The method set forth in claim 1, wherein the data stream is grouped into a single stream object if it is determined that the stream specific information require to be changed.
5. The method set forth in claim 1, wherein the stream specific information is written in a management information recording area where presentation control information of data stream is to be written.
6. A method of providing data stream and stream specific information recorded in a disk, comprising the steps of:
 - (a) determining whether it is the time to send stream specific information;
 - (b) obtaining stream specific information related with a stream object being reproduced or to be reproduced based on the determination result; and
 - (c) transmitting the obtained stream specific information.

7. The method set forth in claim 6, wherein the stream objects have different contents of stream specific information each other.

8. The method set forth in claim 6, wherein said step (b) 5 searches for stream specific information corresponding to a stream object based on an additional information appended to each stream specific information, the additional information having data to link stream specific information with a stream object.

10 9. The method set forth in claim 8, wherein the additional information has start and/or end position data of a related stream object.

10. The method set forth in claim 6, wherein the stream specific information has been written in a management 15 information recording area where presentation control information of data stream has been written.

11. The method set forth in claim 6, wherein said step (a) determines that it is the time to send the stream specific information when a current reproduction position on the disk 20 is moved.

12. The method set forth in claim 6, wherein said step (a) determines that it is the time to send the stream specific information when a connected device receiving reproduced data stream is turned on.

25 13. The method set forth in claim 6, wherein said step (a) determines that it is the time to send the stream specific information when data stream belonging to a new stream object starts to be reproduced.

14. The method set forth in claim 6, wherein said step 30 (a) determines that it is the time to send the stream specific information when a digital bus connected to a device receiving reproduced data stream is reset.

15. The method set forth in claim 6, wherein said step

(a) determines that it is the time to send the stream specific information when the viewing channel of the connected device receiving reproduced data stream is changed.

16. The method set forth in claim 6, wherein said step
5 (c) transmits the obtained stream specific information more than once before sending reproduced real video and/or audio data stream.

17. The method set forth in claim 6, wherein data packets delivering the stream specific information contains time
10 reference information to be used for data presentation timing in a connected device receiving reproduced data stream.

18. A disk device comprising divided recording areas, one being a data area where digital stream of video and/or audio data is written, the other being a management information area
15 where stream specific information and management data for controlling the reproduction and presentation of the data written in said data area are written, wherein the stream specific information is associated with each stream object which is grouping unit of the written digital stream.

20 19. A disk device set forth in claim 18, wherein the stream specific information is associated with each stream object by linking information appended to each stream specific information, the linking information being indicative of start and/or end position of an associated stream object.